October 10, 2007

Horrocks Engineers
Attn: Brad Powell
One West Main Street
American Fork, UT 84003

RE: Layton Interchange Project

Dear Mr. Powell:

Enclosed please find one copy of the final report of the cultural resource and paleontological assessment of the proposed Layton Interchange project, in Davis County, Utah. An electronic copy of the report has been submitted to Ms. Jennifer Elsken, UDOT Region 1 Archaeologist, which she has accepted as the final. If you have any questions please don't hesitate to contact me at your earliest convenience. Thank you for choosing EarthTouch Inc. for your environmental needs.

Sincerely,

Lorna Billat

Lorna Billat
Senior Archaeologist
EarthTouch, Inc.
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enc

A CULTURAL RESOURCE AND PALEONTOLOGICAL FILE REVIEW OF THE PROPOSED LAYTON INTERCHANGE PROJECT, LAYTON, DAVIS COUNTY, UTAH

Utah Department of Transportation
Layton Interchange Project / ISTP-15-7(212)324E

ET Cultural Resource Report 07-17

By

Scott Billat

Prepared for
Horrocks Engineers
American Fork, Utah

Submitted by
EarthTouch, Inc.
3135 N. Fairfield Road, Suite D
Layton, UT

9 October 2007

ABSTRACT

On behalf of Horrocks Engineers, EarthTouch, Inc. has conducted a cultural resource and paleontological assessment of the proposed Layton Interchange project, crossing Interstate 15, in Layton, Utah. The project involves the development of a new interchange on I-15, along with a new connector road that will join Fort Lane, Main Street, and Flint Street, extending for a total of ¾ of a mile. The proposed road will cross over Interstate 15 and the Union Pacific Railroad corridor. The Utah Department of Transportation (UDOT), Region 1, is the state highway agency coordinating the project for the FHWA.

Because at least two previous and recent cultural resource pedestrian inventories have been conducted along and near the current project location, no additional Class III pedestrian inventory was required for this project. One previously-recorded site, 42DV87, the Union Pacific Railroad, intersects the central portion of the project area. The site has already been determined eligible for the National Register. Also, a paleontological literature review was conducted for the project with negative results.

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1.0 INTRODUCTION

EarthTouch, Inc. conducted a cultural resource and paleontological assessment of the proposed Layton Interchange project, crossing Interstate 15, in Layton, Utah (Figure 1). The project involves the development of a new interchange on I-15, along with a new connector road that will join Fort Lane, Main Street, and Flint Street, extending for a total of ¾ of a mile. The proposed road will cross over Interstate 15 and the Union Pacific Railroad corridor. The assessment was requested by Mr. Brad Powell, Horrocks Engineers, of American Fork, Utah. The Utah Department of Transportation (UDOT), Region 1, is the state highway agency coordinating the project for the Federal Highways Administration (FHWA). The above designated project location has been recently inventoried by two other consultants (Orth and Shurack 2001; Christensen et al. 2003), and the proposed Area of Potential Effect (APE) has been adequately covered.

The proposed preferred alternative for the project would include a new five lane roadway from Fort Lane to Flint Street (750 South connection) and a full interchange over I-15 at MP #330. The project also includes a free-flow ramp from Main Street southbound to connect with the new southbound on-ramp to I-15. Additionally, Main Street at Gentile Street will be widened to three travel lanes in each direction with two left-turn lanes. A new overpass will be constructed over the Union Pacific Railroad as part of the new interchange, and the existing 900 South railroad crossing will be altered. Signalized intersections will be developed at Flint Street, Main Street, and Fort Lane oriented in the southerly direction, and one left-turn lane, along with one dedicated right-turn lane would be completed in each of the remaining directions.

2.0 LOCATION

The project area is generally situated in the southern portion of Layton, Utah. The APE is proposed to be about ¾ of a mile long, beginning on the east side of Interstate 15 at Fort Lane Road and proceeding west, over Interstate 15, Main Street, and the Union Pacific Railroad, ending at its intersection with Flint Street. The proposed road will traverse the north half of Section 28 T4N R1W, and end in the east half of Section 29 T4N R1W (Figure 2). The project area is situated on the Kaysville, Utah USGS 7.5 min. Quadrangle map.

3.0 ENVIRONMENT

Orth and Shurack (2001:2) provided the following discussion regarding the environmental setting:

> The project area lies in the Salt Lake Valley, in Layton, Utah, west of the Wasatch Mountain Range, and east of the Great Salt Lake. The majority of the project area falls within the Ironton-Logan-Draper soil association, which is moderately well drained to very poorly drained and highly to slightly calcareous silt loam and silty clay loam associated with lake-laid sediments with little to no salt or alkali content. Natural vegetation in the area has been heavily impacted by urban development, though open fields, empty lots, and agricultural fields, are present within the project area. Vegetation consists of various grasses and ornamental shrubs, as well as alfalfa in the agricultural fields. Natural water sources in the immediate area include the Kays Creek and the North Fork of Holmes Creek. Elevation along the project corridor is approximately 4,320 feet above sea level.

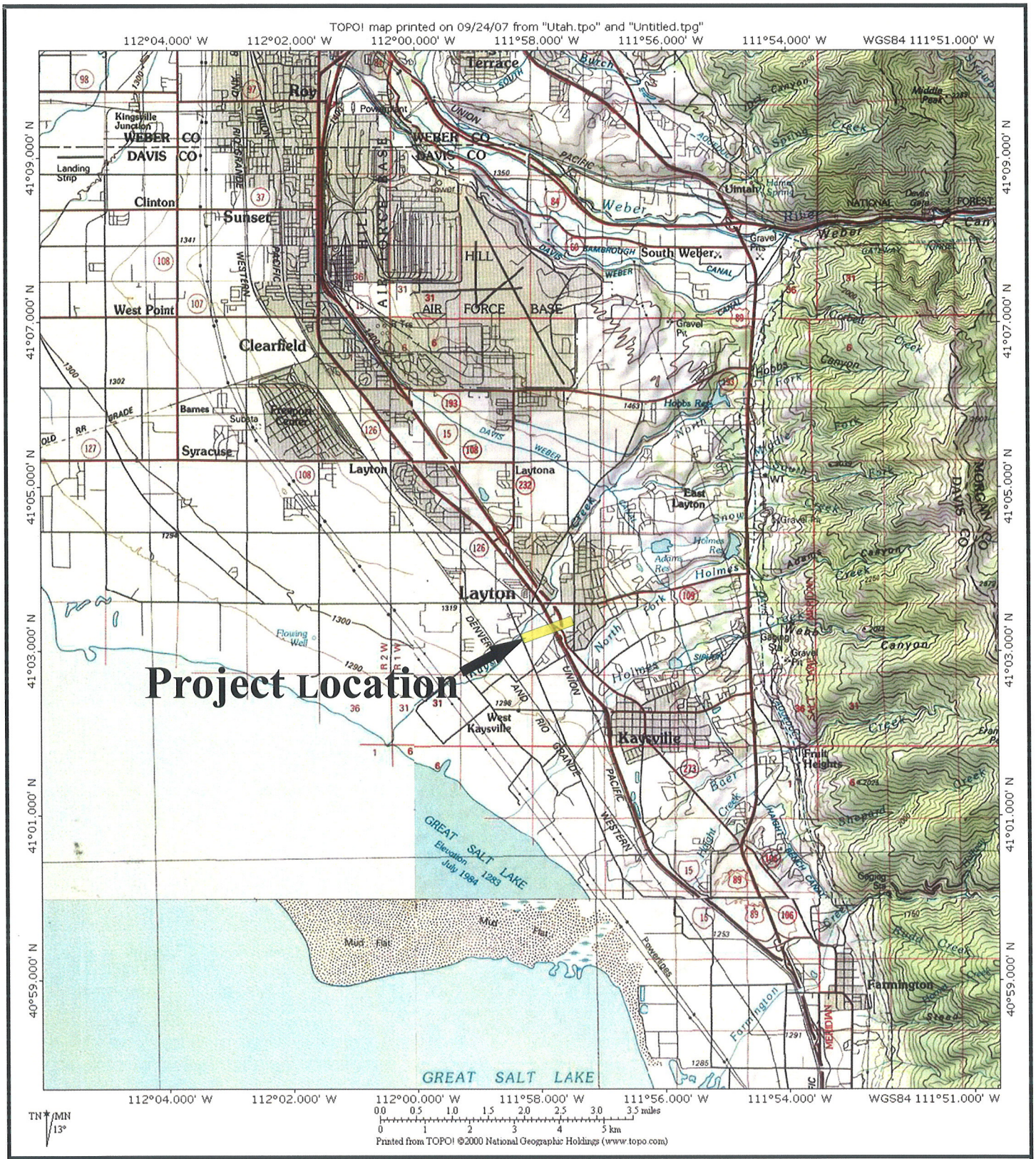

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Figure 1

General Project Location

Layton Interchange Project

Project: ISTP-15-7(212)324E / Layton Interchange

Source: 1:100,000 map
USGS - Farmington, UT (1989)

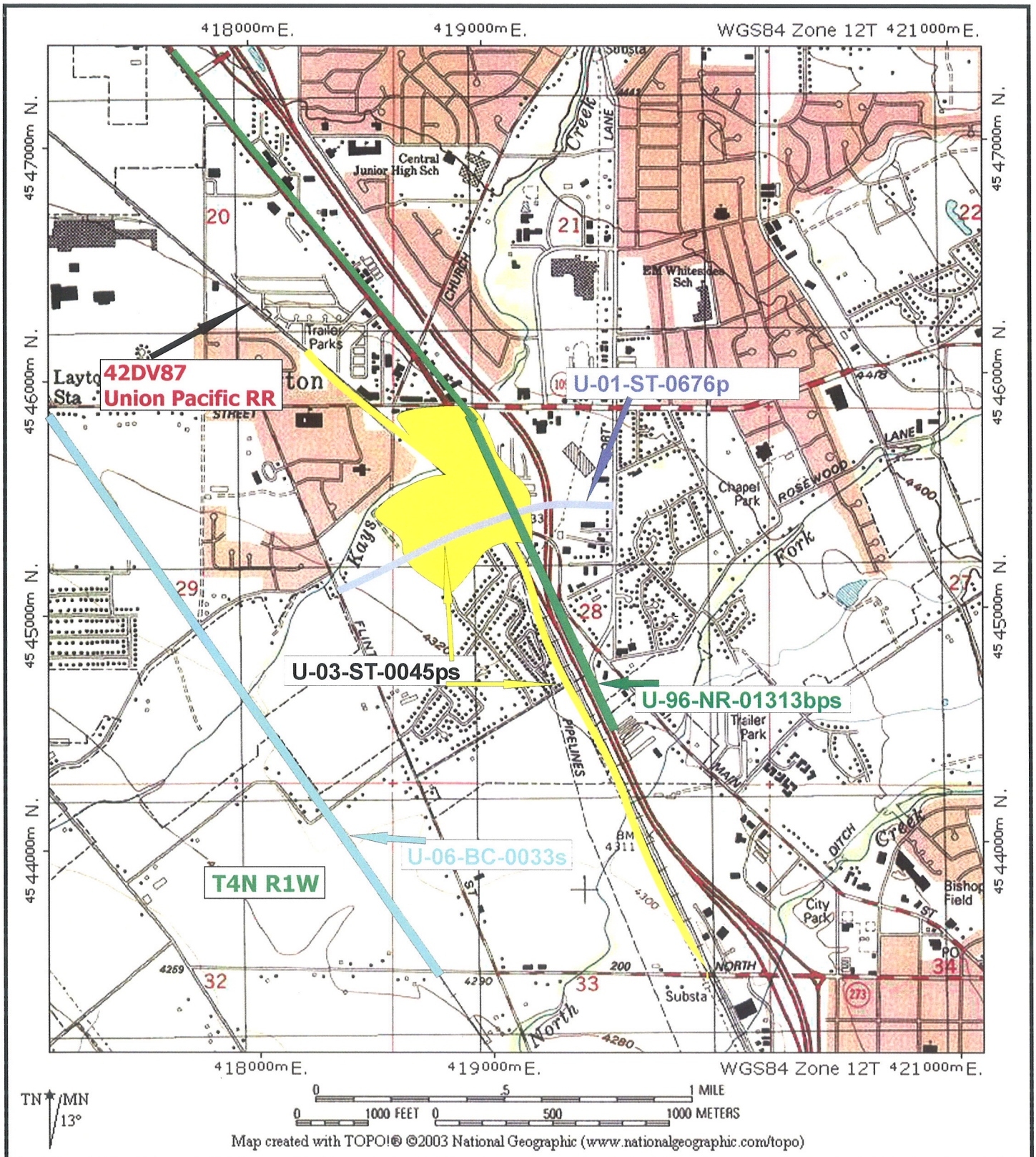

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Figure 2

Project Map and Class I Projects

Layton Interchange Project

Project: ISTP-15-7(212)324E / Layton Interchange

USGS 7.5 min Quad: Kaysville, UT (1992)

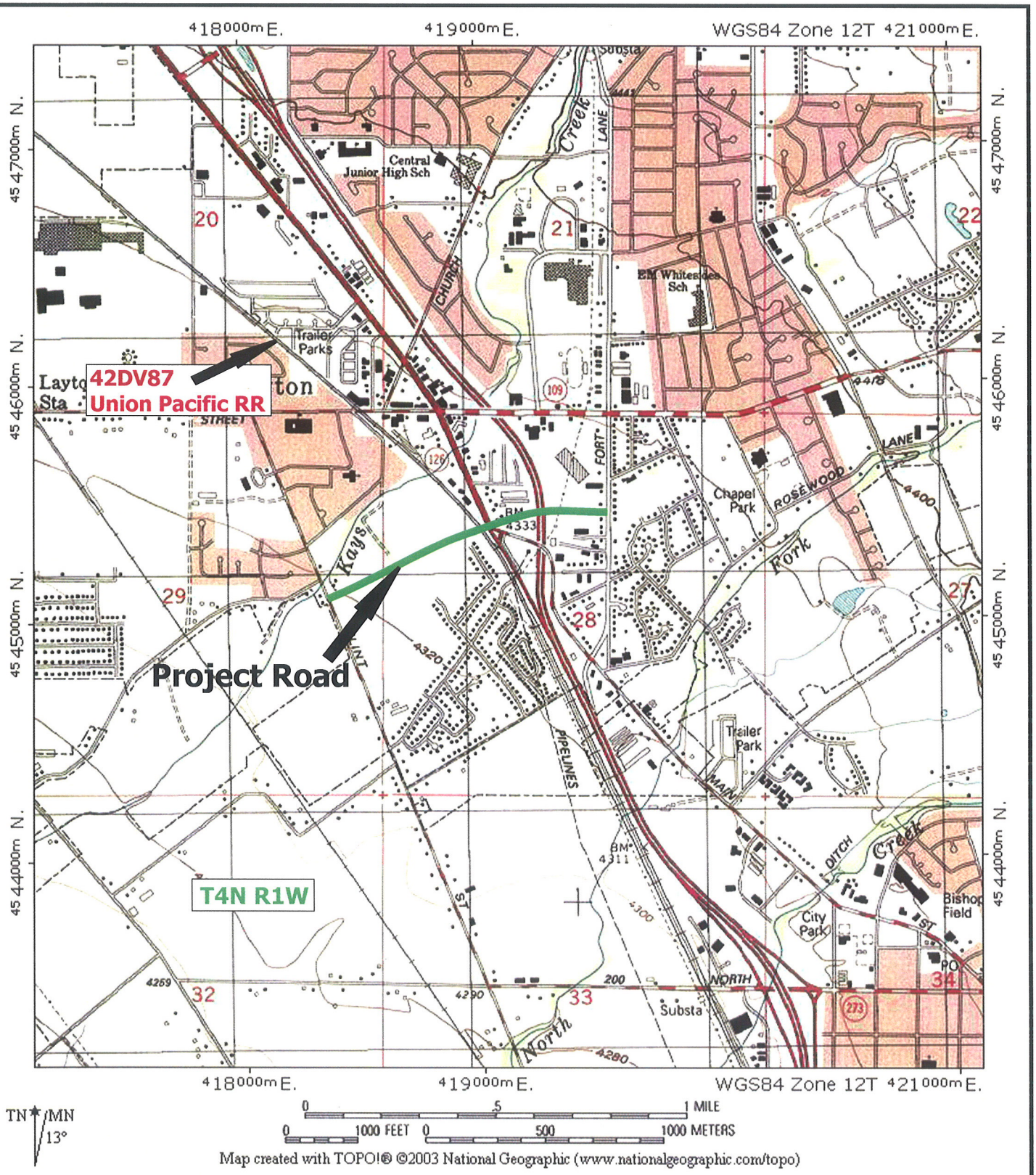

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Figure 3

Project Location Map

Layton Interchange Project

Project: ISTP-15-7(212)324E / Layton Interchange

USGS 7.5 min Quad: Kaysville, UT (1992)

4.0 PREVIOUS RESEARCH

A literature review was conducted at the Utah State Historic Preservation Office (USHPO) on August 27, 2007. Four previously conducted inventories were reported within 1/2 mile of the project area. Two of these recent surveys, Orth and Shurack (2001) and Christensen et al. (2003), encompassed the proposed project area. These are described in Table 1 and Figure 2. One previously recorded site, 42DV87, the Union Pacific Railroad, crosses the current project boundaries. The railroad is determined eligible according to the site forms and associated reports (Barlow et al. 1996; Christensen et al. 2003).

Table 1. Previous Inventories Conducted In or Near the Current Project Area.

Project Number	Project Name	Sites Found	Organization and Author(s)	Year
U96-NR-131bps	Cultural Resource Inventory Survey for the Proposed Worldcom Seattle to Salt Lake City Fiber Optic Line , Part 1: Utah	42DV87 (UPRR)	Northwest Archaeological Associates/Barlow et al.	1996
U-06-BC-0033s	Denver and Rio Grande Western Rail Trail Construction Project, Davis and Weber Counties, Utah.	42DV86 (DRGW)	Office of Public Archaeology, Brigham Young University/Harris	1991
U-01-ST-0676p	Class III Cultural Resource Inventory for the South Layton I-15 Interchange Project in Davis County, Utah	42DV87 (UPRR), io1, io2	SWCA, Inc. Environmental Consultants/Orth and Shurack	2001
U03-ST-0045ps	A Class III Cultural Resources Inventory and Reconnaissance Level Historical Buildings Survey of the Proposed Commuter Rail Corridor and Nine Station Locations, Weber, Davis, and Salt Lake Counties, Utah	42DV87 (UPRR)	SWCA, Inc. Environmental Consultants./Christensen et al.	2003

5.0 CULTURAL RESOURCES

As previously indicated two other consultants, Orth and Shurack (2001) and Christensen et al. (2003) have recently covered the current APE during their inventories, no additional fieldwork is necessary. One previously recorded historic site has been identified that intersects the APE. Site 42DV87, the Union Pacific Railroad, is located near the central portion of the project area. The site was recorded in 1996 by Barlow et al. and more recently by Christensen et al. (2003) both of whom noted field changes during their inventories and completed site form updates for the railroad. As such, the most current documentation of the railroad was in 2003, which is also sufficiently recent to not warrant a field visit. The only other cultural manifestations in the project included two isolated occurrences of ditch segments noted by Orth and Shurack (2001:21). These were determined to be ineligible.

Site 42DV87 is a segment of the Union Pacific Railroad that parallels Interstate 15 through Farmington (Figure 2). The following is taken from site form updates provided by Barlow et al. (1996) and Christensen et al.

(2003):

> The railroad line described here is restricted to Union Pacific Railroad Company grades surveyed by Northwest Archaeological Associates north of Salt Lake City, in March and April 1996. Although currently owned by the Union Pacific, the construction of these grades can be traced to other railroad companies and to different periods of time.
>
> This portion of the tracks is described as Segment 1 – Salt Lake City to Ogden – Utah Central Railroad Company. The Utah Central was built to connect Salt Lake City with the Union Pacific/Central Pacific transcontinental rail in Ogden. Although the UP had planned to route the transcontinental through Salt Lake City, surveys in 1867 and 1868 indicated that a path around the northern end of the Great Salt Lake was far superior....realizing the importance of the transcontinental connection for Salt Lake City, Brigham Young and other leading Mormons organized a railroad company, the Utah Central, March 1869. On May 17, the company began grading and on September 22 the first rails were laid. Construction began at Ogden, working its way south until reaching Farmington on November 29, 1869. Construction was delayed for a time due to a rail shortage, but the company was able to put a train in operation between Ogden and Farmington by December 6. Passenger service to Salt Lake City began January 10, 1870....In July 1881, the Utah Central Railroad Company consolidated with other Mormon-owned lines, into the Utah Railway Company (Part C-16 1996 42DV87 Site Form Update).
>
> ...The UPRR is an active rail grade that has been operating along its historical alignment from 1869 through present. The site itself is comprised of the right-of-way that is generally defined by a modern fence or other marker, a grade or berm constructed of modern ballast, modern ties and rails, and features ranging from historical to modern age (Christensen et al. 2003:34) .

The route appears to be in good condition and has been impacted by on-going operation and maintenance of the railway as well as the construction of the nearby freeway interchange.

National Register Evaluation: The site is the Union Pacific Railroad that moves between Ogden and Salt Lake City. According to Christensen et al. (2003):

> This site has been determined eligible for listing to the NRHP as a result of earlier undertakings that evaluated segments of the Union Pacific Railroad in these and other counties and states. The determination has been evaluated and the existing documentation appears to be sufficient for the purposes of supporting this determination (Part A-23 2003 42DV87 Site Form Update).

The site is eligible for the National Register under Criterion A as it represents events important to the development of both national and regional transportation. Additional historical features (culverts) noted by Christensen et al. (2003) along portions of the segment between Ogden and Salt Lake City contribute to the overall eligibility of the segment under Criterion C. The rail line retains integrity and is determined to be

eligible.

6.0 PALEONTOLOGICAL RESOURCES

A review of the paleontological records was conducted on September 5, 2006, with Martha Hayden of the Utah Geological Survey (see Appendix A). No previous paleontological finds have been recorded in the project area and the discovery of significant vertebrate fossils is unlikely. However, Lake Bonneville deposits that may also be exposed here have the potential for yielding significant vertebrate fossil localities. Be aware of possible impacts to paleontological resources if these deposits are disturbed as a result of construction activities.

7.0 SUMMARY AND CONCLUSIONS

EarthTouch, Inc. has conducted a cultural resource and paleontological assessment of the proposed Layton Interchange project, crossing Interstate 15, in Layton, Utah. The proposed preferred alternative for the project would include a new five lane roadway from Fort Lane to Flint Street (750 South connection) and a full interchange over I-15 at MP #330. The project also includes a free-flow ramp from Main Street southbound to connect with the new southbound on-ramp to I-15. Additionally, Main Street at Gentile Street will be widened to three travel lanes in each direction with two left-turn lanes. A new overpass will be constructed over the Union Pacific Railroad as part of the new interchange, and the existing 900 South railroad crossing will be altered. Signalized intersections will be developed at Flint Street, Main Street, and Fort Lane oriented in the southerly direction, and one left-turn lane, along with one dedicated right-turn lane would be completed in each of the remaining directions.

Four previously conducted inventories were reported within 1/2 mile of the project area. Two of these projects have encompassed the current project area. Since the APE has been adequately covered by at least two recent inventories, Orth and Shurack (2001) and Christensen et al. (2003), no additional survey was needed. One previously recorded site, 42DV87, the Union Pacific Railroad intersects the central portion of the project APE. The site has already been determined eligible for the National Register.

8.0 REFERENCES

Barlow, K. Renee, Nancy D. Sharp, Lorelea Hudson, Gary Bowyer, and Christian J. Miss
1996 Cultural Resources Inventory Survey Completed for the Proposed Worldcom Seattle to Salt Lake City Fiber Optic Line, Part 1:Utah. Northwest Archaeological Associates, Inc. Seattle. [U-96-NR-0131bps]

Christensen, Jim, Charles Easton, and Sheri Murray Ellis
2003 A Class III Cultural Resources Inventory and Reconnaissance Level Historical Buildings Survey of the Proposed Commuter Rail Corridor and Nine Station Locations, Weber, Davis, and Salt Lake Counties, Utah. SWCA, Inc. Environmental Consultants. Salt Lake City, Utah. [U-03-ST-0045ps]

Harris, Deborah C.
2006 Denver and Rio Grande Western Rail Trail Construction Project, Davis and Weber Counties, Utah. Office of Public Archaeology, Brigham Young University, Provo, Utah. [U-06-BC-0033s)

Orth, Rachel and Nichol Shurack
2001 Class III Cultural Resource Inventory for the South Layton I-15 Interchange Project in Davis County, Utah. SWCA, Inc. Environmental Consultants. Salt Lake City, Utah. [U-01-ST-0676p]

APPENDIX A - PALEONTOLOGY LETTER

JON M. HUNTSMAN, JR.
Governor
GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Utah Geological Survey
RICHARD C. ALLIS
State Geologist/Division Director

September 5, 2007

Lorna Billat
Earth Touch Inc.
3135 North Fairfield Road, Suite D
Layton UT 84041

RE: Paleontological file search and recommendations for the UDOT Layton Interchange Project (HRK-037), Davis County, Utah
U.C.A. 63-73-19 (Paleontological) Compliance; Request for Confirmation of Literature Search according to the UDOT/UGS Memorandum of Understanding.

Dear Lorna:

I have conducted a paleontological file search for the Layton Interchange Project in response to your email of September 4, 2007. This project qualifies for treatment under the UDOT/UGS executed Memorandum of Understanding.

There are no paleontological localities recorded in this project area. Quaternary alluvial deposits that are exposed here area have a low potential for yielding significant fossil localities. However, Lake Bonneville deposits that may also be exposed here have the potential for yielding significant vertebrate fossil localities. So please be aware of possible impacts to paleontological resources if these deposits are disturbed as a result of construction activities. Unless fossils are discovered as a result of construction activities, this project should have no impact on paleontological resources.

If you have any questions, please call me at (801) 537-3311.

Sincerely,

Martha Hayden

Martha Hayden
Paleontological Assistant

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UTAH DNR GEOLOGICAL SURVEY